CURRICULUM VITAE

Personal Data		
Name	: Amir Radzi Ab. Ghani	
IC. No.	: 710815-03-5543	
Date and Place of Birth	: 15th August 1971, Kota Bharu, Kelantan	
Sex	: Male	
Nationality	: Malaysian	
Current Employer	: Universiti Teknologi MARA (UiTM)	
Address	: Faculty of Mechanical Engineering Universiti Teknologi MARA 40450 Shah Alam, Selangor Malaysia.	
Telephone No.	: 603-55435279	
Fax No.	: 603-55435160	
Position	: Associate Professor	
Signature	:	
Date	: 03 Jan 2022	

Educational Qualifications	
1991 - 1994	: B.Eng. (Hons) 2nd Class Division One Mechanical Systems and Design Engineering, The University of Liverpool, United Kingdom
1994 - 1995	: M.Sc (Eng.) Mechanical Systems Engineering The University of Liverpool, United Kingdom

2008 - 2014	: PhD University of Malaya, Malaysia

Working Experience	
1995 - 2006	: Researcher/Engineer at Advanced Manufacturing Centre, SIRIM Berhad
2006 - 2009	: Lecturer, Dept. Engineering Design and Manufacture, Faculty of Engineering, University of Malaya
2009 - present	: Associate Professor, Faculty of Mechanical Engineering, University Teknologi MARA Team Principal, UiTM Motorsport, Formula SAE

Professional Courses Completed	
1995	: Computer Aided Design (Unigraphics Solid Modeling)
1996	: Computer Aided Design (Unigraphics Advance Modeling)
1997	: Finite Element Analysis (Pro/MECHANICA Structure)
1997	: Computer Aided Product Design (at GINTIC, Singapore)
1999	: Finite Element Analysis (Femap and CSA/Nastran)
1999	: ISO 9000 Introduction and Documentation
2000	: Project Management System (OpenPlan)
2001	: Finite Element Analysis (MSc Patran/Nastran)
2002	: ISO 9001:2000 – Documentation Review
2003	: MSC Patran/Nastran Composite Training
2003	: LS-Dyna Non-Linear/Impact Analysis Training
2004	: Practical Fatigue Theory
2004	: Finite Element Modelling Skills and Technique
2004	: ISO/TS16949:2002 – Understanding and Introduction

2004	: Design Failure Modes and Effects Analysis
2009	: Basic Teaching Method
2010	: Positive Mindset Workshop
2011	: Formula Student/SAE by University of Herefordshire
2013	: Instron Dynatup Impact Training
2014	: Lab Accreditation ISO 17025 and Calibration by SAMM
2014	: Measurement Uncertainty by SAMM
2017	: Shimadzu Servopulser Training
2019	: LS Prepost/Dyna and Pre-Sys FEA training

Professional Membership/ Qualification
• Professional Engineer with Practising Certificate and Member of Board of Engineers, Malaysia (PEPC)
• Corporate Member of Institute of Engineers, Malaysia (MIEM)

Field of Specialisation
• Computer Aided Design (CAD) – 3D modeling, advanced surface modeling, assembly and detail drawing
• Computer Aided Engineering (CAE) – Finite element analysis (FEA) for structural impact
• Automotive, mechanical structure and system design
• Fracture mechanics and structural crashworthiness

Teaching Experience	
2000	: Thermofluid (B.Eng. UiTM)
2000 - 2001	: Heat Transfer (B.Eng. UiTM)
2001	: Thermodynamics (B.Eng. UiTM)
2001	: Strength of Materials (B.Eng. UiTM)
2004 - 2007	: Computer Aided Engineering (Executive Diploma UMCCED)
2006 - 2007	: Applications of CAD/CAM/CAE (B.Eng. UM)
2006 - 2008	: Computer Aided Design (CAD) (B.Eng. UM)
2006 - 2009	: Finite Element Analysis (M.Eng. UM)
2008	: Design for Manufacturing and Assembly (B.Eng. UM)
2009	: Finite Element Analysis (B.Eng. UM)
2009	: Heat Transfer (B.Eng. UiTM)
2009 - 2012	: Dynamics and Vibrations (B.Eng. UiTM))
2010 - 2012	: Basic Mechanics (B.Eng. UiTM)
2010	: Abaqus Finite Element Analysis Workshop for AMMP, University of Malaya.
2011	: Instructor for Finite Element Analysis (Abaqus) organized by Advanced Material and Manufacturing Process (AMMP), University of Malaya
2012-2017	: Engineer in Society (B. Eng. UiTM)
2013-2015	: Strength of Materials (B.Eng. UiTM)
2014-2018	: Finite Element Analysis (B. Eng. UiTM)
2016 - present	: Mechanical Engineering Design (B. Eng. UiTM)

Publications	
Citations 146	**H Index 6**
Conferences	
• Julaiha Adnan, Amir Radzi Ab. Ghani, Cher Dong Theng, Muhd. Khafif Zol Azlan dan Noormee Nordin. Development of an Integrated Design Failure Expert System for Concurrent Product Development. National Conference on Advances in Mechanical Engineering, May 2005.	
• Julaiha Adnan, Amir Radzi Ab. Ghani, Cher Dong Theng, Muhd. Khafif Zol Azlan dan Noormee Nordin. Development of an Integrated Design Failure Expert System for Concurrent Product Development. National Conference on Management of Technology and Technology Entrepreneurship, June 2005.	
• Amir Radzi Abdul Ghani. Impact Energy Absorption of Circular Arrayed Tubes Enclosed Within a Cylinder: The Proposed Study. AUN/SEED Net Field Wise Seminar, September 2007, Hanoi, Vietnam.	
• Azuddin Mamat, Aznijar Ahmad Yazid, Amir Radzi Abdul Ghani and Abdullah Wagiman. Burr Formation Characteristics of Various Engineering Materials in Micro Milling. 1st AUN/SEED Net Regional Conference in Manufacturing Engineering, November 2008, Manilla, Philippines.	
• Lion Kok Hao, Amir Radzi Abdul Ghani, Prasetyo Edi and Khairi Yusuf. Dynamic Loading of Concentric Circular Tubes. 11th WSEAS International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems (MAMETICS), Spain, July 2009.	
• Khairi Yusuf, Prasetyo Edi and Amir Radzi Abdul Ghani Shape Reconstruction of Specular Surface Using Normal Vectors. 11th WSEAS International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems (MAMETICS), Spain, July 2009.	
• Prasetyo Edi, Khairi Yusuf and Amir Radzi Abdul Ghani. The Conceptual Design of Very Light Jet. 11th WSEAS International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems (MAMETICS), Spain, July 2009.	
• Mohd Zaid Othman, Syazana Shafee, Amir Radzi Abdul Ghani, Ahmad Mujahid Ahmad Zaidi. Finite Element Analysis Simulation of Rolled Homogeneous Armour Steel Plate due to Blast Load. The Defence & Technology Conference, Kuala Lumpur, Oct 2009.	

- Mohd. Hanif Mat and Amir Radzi Ab. Ghani, 'Design and Analysis of 'Eco' Car Chassis. International Symposium on Robotics and Intelligent Sensors (IRIS) 2012, Malaysia.

- Amir Radzi Abdul Ghani, Chong Siak Kee and Hafizan Hashim. Finite Element Analysis of Square Hollow Section Column with U-Shaped Grooves Subjected to Dynamic Mid Span Loading. International Conferences of Advances in Mechanical Engineering (ICAME), Malaysia, Dec 2010.

- Hafizan Hashim, A.R.A. Ghani, A.K. Makhtar, M.H.M. Ramli, M.N.A.A. Patar. Active Tendon Vibration Control of Cantilevered Beam Using Shape Memory Alloy (SMA) Actuators. International Conference on Mechanical and Aerospace Engineering (ICMAE) 2010, Malaysia.

- Amir Radzi Ab. Ghani, Ramlan Kasiran, Mohd. Shahriman Adenan, Mohd. Haniff Mat, Rizal Effendy Mohd. Nasir, Mohd. Faizal Mohamed and Wan Ahmad Najmi Wan Mohamad, 'Novel Design of Impact Attenuator for an "Eco Challenge' Car. Regional Conference on Automotive Research (ReCAR) 2011, Kuala Lumpur, Malaysia.

- Naziratie Assrinie Assan, Amir Radzi Ab Ghani, Ramzyzan Ramly 'Crush Response of Stacked Square Toroidal Tubes with a Central Tube'. Mechanical Engineering & Science Postgraduate International Conference 2016, Kuala Lumpur, 2016

- Hafizan Hashim , Amir Radzi Ab Ghani, Wahyu Kuntjoro, ' Bending Collapse of Closed-Hat Section Beams, Part II: Theoretical Model Modification and Validation'. Mechanical Engineering & Science Postgraduate International Conference 2016, Kuala Lumpur, 2016

- Hafizan Hashim, Amir Radzi Ab Ghani, Wahyu Kuntjoro, ' Bending Collapse of Closed-Hat Section Beams, Part I: Development and Validation of Finite Element Models'. Mechanical Engineering & Science Postgraduate International Conference 2016, Kuala Lumpur, 2016

- Ramzyzan Ramly, Rizal E.M. Nasir, Zulkifli Mohamed, Amir Radzi Ab Ghani 'Multi Configuration Stiffened Panels under Compressive Load. Part 1 – Theoretical Analysis'. Proceedings for 4th International Conference on Science and Social Research (CSSR 2017), Malaysia, 2017.

- NM Hassin, MA Yunus, AR Abdul Ghani, MN Abdul Rani, S Kasolang 'Using Updated Model for the Crash Analysis'. 23rd International Congress on Sound & Vibration (ICSV23), Greece, 2016

- Najwa Syakirah Hamizan, Solehuddin Shuib, Amir Radzi Ab Ghani, Abdul Halim Abdullah, Muhammad Rajaie Ahmad Mohd Zain, Nawaf Hazim Saeid, Izhar Aziz. 'Design for additive manufacturing (dfam) for hip prosthesis for 3D printing'. 2nd International Conference on Biomechanics and Medical Engineering (ICBME), Malaysia, 2021.

Journals

- Amir Radzi Ab. Ghani, M.A. Hassan, Zahari Taha and M. Hamdi, 'Effect of Slot Geometry on the Impact Response of Square Column'. Advanced Science Letters 2012; 13:1-7. ISI impact factor 1.253.

- Prasetyo Edi, Khairi Yusuf and Amir Radzi Abdul Ghani. The Design of Light Jet Aircraft. WSEAS TRANSACTIONS ON APPLIED AND THEORETICAL MECHANICS, Volume 4, ISSN: 1991-8747.

- Lion Kok Hao, Amir Radzi Abdul Ghani, Prasetyo Edi and Khairi Yusuf. Impact Energy Absorption of Concentric Circular Tubes. WSEAS TRANSACTIONS ON APPLIED AND THEORETICAL MECHANICS, Volume 4, ISSN: 1991-8747.

- Hafizan Hashim, A.R.A. Ghani, A.K. Makhtar, M.H.M. Ramli, M.N.A.A. Patar 'Active Tendon Vibration Control of Cantilevered Beam Using Shape Memory Alloy (SMA) Actuators'. Applied Mechanics and Materials, 110-116 (2012) 740-747. Cited by Scopus.

- Khairi Yusuf, Prasetyo Edi and Amir Radzi Abdul Ghani. 3D Shape of Specular Surface Measurement using Five Degrees of Freedom Camera System. WSEAS TRANSACTIONS ON APPLIED AND THEORETICAL MECHANICS, Volume 4, ISSN: 1991-8747.

- Amir Radzi Ab. Ghani, M.A. Hassan, Zahari Taha and M. Hamdi, 'Impact Response of Multi-Slotted Square Column', Journal of Mechanical Engineering (JMechE), 2011; Vol.8, No.2: 71-91. Cited by Scopus.

- Adi Maimum, Shaharuddin Ahmad and Amir Radzi Ab. Ghani, 'Structure Strength of Semi-SWATH: Real Time Measurement'. Canadian Journal on Computing in Mathematics, Natural Sciences, Engineering and Medicine, Vol. 4, No. 2, 197-200 (2013).

- Rizal E.M. Nasir, Firdaus Mohamad, Ramlan Kasiran, M. Shahriman Adenan, M. Faizal Mohamad, M. Hanif Mat, Amir R. A. Ghani.'Aerodynamics of ARTeC's PEC2011 EMo-C Car'. Procedia Engineering 41 (2012) 1775-1780.

- Mohd. Hanif Mat and Amir Radzi Ab. Ghani, 'Design and Analysis of 'Eco' Car Chassis'. Procedia Engineering 41 (2012) 1756-1760.

- Amir Radzi Ab. Ghani, Hafizi Lukman and Hafizan Hashim.'Impact Response of Circular Tube with Concentric Plunger.' Applied Mechanics and Materials, 275-277 (2013) 792-798. Cited by Scopus.

- Wan Noaimadudin Wan Mohamad Kamal, Nor Hayati Saad, Amir Radzi Ab. Ghani and Khairul Izwandy Abd. Jazam. 'Modelling and Simulation of a Single Deck Bus Subjected to Rollover Crash Loading'. Applied Mechanics and Materials, 393 (2013) 453-459. Cited by Scopus.

- Amir Radzi Ab Ghani, Chong Siak Kee, Mohd Zaid Othman, Md Fuad Shah Koslan & Ahmad Mujahid Ahmad Zaidi. 'Impact Response of Multi-Grooved Square Column'. Modern Applied Science, 7(11) 12-25 (2013). Cited by Scopus.

- Amir R.A. Ghani and M.A. Hassan.'Axial Crush Behaviour of Square Column with External Tapered Plunger'. Journal of Engineering Sciences, Assiut University, Faculty of Engineering, Vol. 41, No. 4 (2013) 1-20. Cited by Scopus.

- Hassan, MA, Amir Radzi AB, Zahari Taha and M.A. Hamdi. 'Mechanics of Energy Absorption by Progressive Plastic Deformation of a Square Column with an Ellipsoidal Bulge Base'. Applied Mathematics and Information Sciences. Vol. 9 (1L) (2015). 51-58. Indexed by ISI. IF 1.232

- Hafizi Lukman, Amir Radzi Ab. Ghani, Hafizan Hashim and Muhammad Safwan bin Saiful Bhari. 'Impact Response of Circular Tube with Multiple Slot Geometry'. European International Journal of Science and Technology. Vol. 3, No. 7 (2014).

- Hafizi Lukman, Amir Radzi Ab. Ghani, Hafizan Hashim, Mohd. Adzureen bin Zulkefli, M. Mahat. 'Experimental Investigation on the Maximum Axial Force of Aluminium Square Column'. Jurnal Teknologi. Vol. 76. No. 11 (2015).

- Mohd Zaid Othman, Lee Choon Yuan, Mohd Aidil Mohd Yusop, Amir Radzi Ab Ghani, Md Fuad Shah Koslan, Jestin J and Ahmad Mujahid Ahmad Zaidi. 'Numerical Simulations of Exposed Circular Surface of Rolled Homogeneous Armor Steel Plates Subjected to Blast Loadings by Using AUTODYN 2D'. Modern Applied Science. Vol. 9. No. 3 (2015).

- Hafizan Hashim, Amir Radzi Ab Ghani, Hafizi Lukman and N.V. David. 'A Comparative Study of Obliquely Positioned Aluminium Alloy 6063 Tubes under Axial Loading'. Advanced Materials Research. Vol. 1133 (2016).

• Prescilla Christy Albert, Amir Radzi Ab Ghani, Mohd Zaid Othman & Ahmad Mujahid Ahmad Zaidi.'Axial Crushing Behaviour of Aluminium Square Tube with Origami Pattern'. Modern Applied Science. Vol. 10, No. 2 (2016)
• MZ Othman, QH Shah, MAM Khan, TK Sheng, MA Yahaya, AR Ab Ghani 'Numerical Simulations of V-Shaped Plates Subjected to Blast Loadings: A Validation Study'. Modern Applied Science 10 (11), 2016
• H Hashim, Amir Ab Ghani, W Kuntjoro 'Bending Response and Energy Absorption of Closed-Hat Section Beams'. Modern Applied Science 10 (11), 2016
• Amir Radzi Ab. Ghani, Ramlan Kasiran, Mohd. Shahriman Adenan, Mohd. Haniff Mat, Rizal Effendy Mohd. Nasir, Mohd. Faizal Mohamed and Wan Ahmad Najmi Wan Mohamad, 'Novel Design of Impact Attenuator for an "Eco Challenge' Car. Applied Mechanics and Materials 2012; 165:237-241. Scopus cited.
• Naziratie Assrinie Assan, Amir Radzi Ab Ghani, Ramzyzan Ramly 'Crush Response of Stacked Square Toroidal Tubes with a Central Tube'. Journal of Mechanical Engineering (JMechE), 2017; Vol.4, No.4: 1-14. Cited by Scopus
• Hafizan Hashim , Amir Radzi Ab Ghani, Wahyu Kuntjoro, 'Bending Collapse of Closed-Hat Section Beams, Part I: Development and Validation of Finite Element Models'. Journal of Mechanical Engineering (JMechE), 2017; Vol.2, No.1: 57-69. Cited by Scopus
• Hafizan Hashim , Amir Radzi Ab Ghani, Wahyu Kuntjoro, ' Bending Collapse of Closed-Hat Section Beams, Part II: Theoretical Model Modification and Validation'. Journal of Mechanical Engineering (JMechE), 2017; Vol.2, No.2: 57-69. Cited by Scopus
• Naziratie Assrinie Assan, Amir Radzi Ab Ghani, Ramzyzan Ramly 'Design and Analysis of Impact Attenuator for UiTM Formula SAE Car 2016'. Journal of Mechanical Engineering (JMechE), 2018; In press. Cited by Scopus
• R Ramly, W Kuntjoro, ARA Ghani, REM Nasir, Z Muhammad 'Multi – configuration stiffened panels under compressive load: Part 1 – Theoretical analysis'. Int. Jou. Of Engineering and Techology (UAE), 2018; 7(3), 38-42
• R Ramly, ARA Ghani, REM Nasir, Z Mohamed, W Kuntjoro 'Multi – configuration stiffened panels under compressive load: Part 2 – Finite element analysis'. Int. Jou. Of Engineering and Techology (UAE), 2018; 7(4), 160-162

• ARA Ghani, MF Hassan, R Ramly ' Design and analysis of Formula SAE car engine restrictor' . Int. Jou. Of Engineering and Techology (UAE), 2018; 7(4), 181-184
• Siti Musalmah Md Ibrahim, Juri Saedon, Amir Radzi, Rohaizat Umar ' Improvement of positional accuracy of developed dicing machine' . Int. Jou. Of Mech. Eng. And Robotic Research, 2019; 8(5), 680-684
• Naziratie Assrinie Assan, Amir Radzi Ab Ghani, Ramzyzan Ramly 'Static Crush Response of Tubular Structure with Internally Stacked Circular Rings'. Journal of Mechanical Engineering (JMechE), 2019. Cited by Scopus
• Naziratie Assrinie Assan, Amir Radzi Ab Ghani, Ramzyzan Ramly 'Impact Response of Tubular Structure with Internally Stacked Circular Rings'. Journal of Mechanical Engineering (JMechE), 2019. Cited by Scopus
• Dicing characterization on optical silicon wafer wave guide. Siti Musalmah Md Ibrahim, Juri Saedon, Amir Radzi Ab Ghani, MHBA Razak. Applied Mechanics and Materials 899, 163-168 (2020)
• Honeycomb carbon sandwich composite panel under compressive load flat-wise: experimental analysis. R. Ramly, W. Kuntjoro, AR Ab Ghani. Journal of Mechanical Engineering (JMechE), 17(3), 13-26 (2020)
• Axial crush response of aluminium square tube with origami pattern. Amir Radzi Ab. Ghani, M. Amirul Syafiq Zulfikry, Ramzyzan Ramly, Mohd Zaid Othman. IOP Conf Series. 1062 (2021)

Postgraduate Supervision
• Completed supervision of MSc candidate with thesis titled' Finite Element Analysis of Hydraulic Bulging of Metal Tubes'. Yeow Kee Heng, Faculty of Engineering, University of Malaya, August 2008.
• Completed supervision of MSc candidate with thesis titled 'Effects of W-beam Guardrail on Soft Body upon Impact'. Aini Zuhra Abdul Kadir, Faculty of Engineering, University of Malaya, August 2008.
• Supervised MSc candidate Wan Noiamadudin Wan Mohamad Kamal. Project titled 'Structure Performance Evaluation of a Single Deck Bus Subjected to Rollover Crash'. Faculty of Mechanical Engineering, UiTM. 2012-2014

• Currently supervising PhD industry candidate Siti Musalmah Md Ibrahim. Project titled 'Design and Development of Table Workpiece Rotary Axis of an Optical Dicing Machine'. Faculty of Mechanical Engineering, UiTM. 2014 onwards. Expected completion 2022.
• Completed supervising PhD candidate Hafizan bin Hashim. Project titled 'Impact Energy Absorption of Multi Layered Cold Formed Channel Section Beam for Crash Barrier Application'. Faculty of Mechanical Engineering, UiTM. 2017
• Currently supervising PhD candidate Hafizi bin Lukman. Project titled 'Impact Response of Tubular Structures with Proposed Trigger Mechanism'. Faculty of Mechanical Engineering, UiTM. 2013 onwards
• Completed supervising MSc candidate Naziratie Assrinie Assan. Project titled 'Impact Energy Absorption of Clustered Toroidal Shells with Central Tube'. Faculty of Mechanical Engineering, UiTM. 2017
• Completed supervising MSc candidate Nur Munirah Hassin. Project titled 'Updated Finite Element Model of Rivited Joined Structure for Crash Analysis'. Faculty of Mechanical Engineering, UiTM. 2017.
• Supervised MSc candidate Mohd Hafiz Othman. Project titled 'Development of Inertial Induced Torque Converter'. Faculty of Mechanical Engineering, UiTM. 2017-2019
• Supervised MSc candidate Nik Ahmad Hambali Nik Ab Rashid. Project titled 'Analysis of Seatbelt towards Car Crashworthiness: Analysis of Car Occupant Seatbelt and Injury Level during Crash Event '. Faculty of Mechanical Engineering, UiTM. 2018-2020.
• Currently supervising MSc candidate Najwa Syakirah Hamizan. Project titled 'Design for Additive Manufacturing and Topology Optimisation of Hip Implant using 3D Printing Technology '. Faculty of Mechanical Engineering, UiTM. 2020.
• Currently supervising Masters Mix Mode candidate Mohamad Shafiq bin Misman. Project titled 'Analysis on the Performance of the Vapor Compression System using Copper-shape-structure (CMS) for Refrigerant Storage'. College of Engineering, UiTM. 2021.
• Currently supervising Masters Mix Mode candidate Muhammad Amin Bin Ismail. Project titled 'The effect of failure criteria on the air conditioner structure made from sgcd1 galvanized steel subjected to drop impact'. 2021.

Major Research Programmes / Projects Completed/ On-going	
1996 - 1999	High Speed Machining (IRPA) Tool characterization and optimization, machining of special parts
1995 - 1996	Computer Aided Industrial Design (IRPA) Integration of CAID, CAD and rapid prototyping (SLA method) for product development
1996 - 2001	Development of Outdoor Inclinator System for Jabatan Bekalan Air Habu, Pahang.
1995 - 2002	Machining of parts, injection moulds and die casts of consumer products, automotive and aerospace components using CAM and high speed CNC machining
2002	Development of Portable Domestic Waste Recycling Machine for Semarak Positif.
2002 - 2005	Integrated Design Failure Expert System for Concurrent Product Development (IRPA)
2004 - 2006	Design and Development of Self Activated Safety System for Outdoor Inclinator System (IRPA, RM275,000)
2007 - 2008	Investigation of Motorcyclist Friendly Crash Barrier in Reducing Injury Levels (UM RU Grant, RM50,000)
2010 - 2012	Impact Energy Absorption of Multi Slotted Column for Automotive Applications (FRGS, RM40,000)
2011-2012	Crushing Characteristics of Uniform Column with Trigger Mechanisms (UiTM Excellence Fund, RM8,000)
2011-2013	Perodua Eco Challenge 2011/2012/2013 (Team leader/Technical Advisor)
2011-2012	Shell Eco Marathon 2012 (Technical Advisor)
2012	A New Design for an Efficient Impact Energy Absorber, Patent, UM.TNC2/UMCIC/603/476, 2012, (National)
2012-2014	Determination of Tensile and Friction Properties of High Performance Latex Coated Yarns (Research Cluster Funds, RM50,000)

2012-2014	Analysis and Structure Improvement of Single Deck Bus due to Rollover Effect Accident. (Research Intensive Faculty Fund, RM32,000)
2013-2015	Impact Response of Obliquely Positioned Triggered Tubes (RAGS, RM 65,000)
2014-2016	Axial Compression and Energy Absorption Characteristics of High-strength Thinwalled Tube under Impact Load (RAGS, RM 80,000)
2015-2017	Crushing Behaviour of Enclosed Tubular Structures for Energy Absorption (FRGS, RM92,200)
2016	Using Embedded Sensors for Analysing Multi Configuration Stiffened Panels under Compressive Loading (Lestari, RM20,000)
2015-2017	Formula SAE-Asean and SAE-Australasia (Team principal)
2016-2018	Performance Characteristics of Inertia Induced Torque Converter (FRGS, RM65,500)
2017	Certifying engineer for Team Eco Photon UiTM for Bridgestone World Solar Challenge 2017
2017-2019	Effects of Material Combination on Energy Absorption Performance of Hat Section Tubes subject to Lateral Loading (FRGS) RM60k
2018-2019	Design and Development of an Electric Vehicle Platform and Drive System for UITM AV1 (TRGS KPT) RM60k
2018-present	Development of UiTM Formula SAE car
2019	Certifying engineer for Team Eco Photon UiTM for Bridgestone World Solar Challenge 2019
2019 – present	Analysis of Bending Behaviour of Hat Section Tubes with Internally Stacked Rectangular and Circular Rings (FRGS) RM70k
2019 – present	Multi Objective Optimization of Head and Thoraic Injury Criteria in Pedestrian Crash Protection using Evolutionary Algorithms (FRGS) RM80k
2019	Mobile Shop Design Competition for Carbon Tech Global RM12k

2021	Fundamental Study of Design for Additive Manufacturing (DFAM) for Hip Implant. Strategic Research Partnership Grant (SRP) RM25k

Technical Services / Consultancy	
1997	Finite Element Analysis (FEA) of Car Boot Cover for Hicom Teck See
1998	Finite Element Analysis (FEA) of Storage Composite Pallet for Intraco Plastics
2000	Finite Element Analysis (FEA) of Water Treatment Propeller Blade for Metal Performance Centre and GTIE
2001	Finite Element Analysis (FEA) of Brake Housing for Engineering Services Group, SIRIM Bhd.
2003	Finite Element Analysis of Needle Hub of Medical Syringe for Pristine Medical
2004	Finite Element Analysis of Mold Components (Collapsible and Collette) of Hypodermic Syringe for Pristine Medical
2004	Finite Element Analysis of CPU Heat Sink
2015	Automotive component testing for Bloxwich
2015	Impact Testing of Carbon Fibre Wound HDPE Composite Tube for Universiti Teknologi Petronas
2015	Impact Testing of Polyurethane Foam for Universiti Pertahanan Nasional Malaysia
2016	Numerical Simulation Consultancy of Single and Multiple Cut Tubular Structures subjected to Axial Loading for Universiti Pertahanan Nasional Malaysia
2016	Simulation of Structural Integrity for Stand Pipe Internals
2016	Mechanical Calculation for Bolt and Threaded Section for Lembaga Getah Malaysia (LGM)

2018	Analysis of Bus Seat (R80) for Transafe Consulting Engineers
2018	Impact Testing of Kenaf and Fibreglass Tubes for Universiti Putra Malaysia
2018	Finite Element Analysis of Loading Platform for M10 Builders
2018 - present	Technical committee for Malaysian Standard New Pneumatic Passenger Car Tyres
2019	Impact Testing of Foam Filled Aluminium Square Tubes for Universiti Malaysia Pahang
2019	Loop Tensile Strength of Stainless Steel Cable Ties for Sigma Resources
2020	FEA of LPG Composite Gas Tank for Rites
2021	Structure Analysis for Ayden subjected to wind loading (FSSR)
2021	Impact Analysis of Composite LPG Tank for Rites

Community Service / Social Contributions	
2013-2018	Technical advisor for SMK Seksyen 9, Shah Alam for F1 in school programme
2017	Automotive engineering booth in Kuala Lumpur Science Fair (KLSF2017)
2018	KL International Motorshow (KLIMS 2018) featuring UiTM AV2 Autonomous Vehicle
2018	Malaysia Autoshow 2018 featuring UiTM Formula SAE
2018	Participate in School of Junior Enginers (SOJE) FKM
2019	Participate in STEM Carnival SMK Seksyen 9, Shah Alam
2019	Organiser and speaker for Motorcycle Safety Forum (MOTOSAFE 2019) with MIROS
2019	Expert witness for Late Fireman Adib Inquest, Shah Alam High Court